THREE NEW SPECIES OF TEXANANUS FROM THE WESTERN AND SOUTHWESTERN UNITED STATES.

By Dwight M. DeLong,* Columbus, Ohio.

By using the internal genital structures of the males it has been possible to obtain excellent diagnostic characters for the species of the genus *Texananus*. The species described at this time have previously been confused by similar external characters with other described species and identified under the names of species which they resemble very closely. *T. latipex* is closely related to *ovatus* and *lathropi*; *monticolus* resembles *cumulatus* and *ultratus* is very similar to *spatulatus*. Illustrations of the male genital structures are presented for more easy identification.

Texananus latipex n. sp.

Resembling *ovatus* in form and general appearance but smaller in size, paler and more uniform in color and with dorsal process of aedeagus more strongly curved. Length, 6 mm.

Vertex bluntly angled, almost twice as wide between eyes at base as median length, produced about half its length before the anterior margin of the eyes.

Color: Vertex, pronotum and scutellum yellowish, rather evenly marked with pale brown ramose pigment, basal angles of scutellum with dark brown spots. Two small brown spots on anterior portion of the disk. Elytra more heavily marked with brown pigment with three commissural spots distinct.

Genitalia: Female last ventral segment with posterior margin rather deeply, broadly excavated between the prominent lateral angles. Male valve rather long, triangular. Plates short with blunt apices, styles elongated and slender, bluntly pointed. Aedeagus in lateral view with the ventral portion rather long and tapered to an acute tip. Dorsal portion broad, strongly curved, sickle shaped, broadened apically and bifid at apex forming two stout teeth.

Holotype male, Ashford, Arizona, July 6, 1937, allotype female, same, and paratype males and females, same, and paratypes from Wickenburg, Arizona; Glenns Ferry, Idaho; Payette, Idaho; Corvallis, Oregon; Shoshone Basin, Idaho; Dixie

^{*} Department of Zoology and Entomology, Ohio State University.

National Forest, Nevada; Chiricahua Mts., Arizona; Faust, Utah; American Falls, Idaho; Tuttle, Idaho; Bruneau, Idaho, in author's collection. The Arizona specimens were collected

by D. J. and J. N. Knull.

A pair of specimens labeled *T. lathropi* Baker collected at Los Angeles Co., Cal., by Coquillett have been forwarded to me for study by Mr. Oman. The male agrees exactly with the species described above but the female of *lathropi* is broadly, squarely excavated. Since the males described above have been collected with females in many localities and none show the excavated character of the last ventral segment it seems reasonable to believe that either the male forwarded by Oman is not the male of *lathropi* or the female is dimorphic in type. Only further collection or observation will prove or disprove this question since the types originally described as *P. annulatus* by Osborn and Lathrop have been destroyed.

Texananus monticolus n. sp.

Resembling *cumulatus* in form and appearance but slightly larger, paler in color, and with ventral portion of aedeagus longer, broader and curved upward at caudal end of dorsal portion. Length, 6.5 mm.

Vertex short and broad, more than twice as wide as long, only about one-half longer on middle than next the eyes,

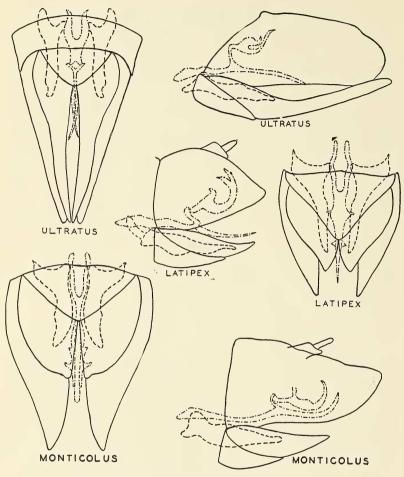
broadly, bluntly angled. Elytra short and broad.

Color: Pale yellowish, vertex sparsely irrorate with brown, pronotum dark on posterior half, scutellum pale, markings indistinct. Elytra sparsely marked with brown pigment lines.

Genitalia: Female last ventral segment similar to *graphicus*, but with lateral angles more produced. Posterior margin with a rather broad deep V-shaped notch more than half way to base, either side of which is a rather deep rounded notch at base. Male plates strongly convexly rounded, apices blunt and rounded, inner margins straight to apices. Plates broader, more convexly rounded than *cumulatus* plates. Aedeagus with dorsal process elongate, apex narrowed and curved dorsally, enclosed in the concavity of the lower portion with curves dorsally at the caudal end of the dorsal portion.

Holotype male and paratype male from Jemez Springs, New Mexico, June 15, 1919. Allotype female and male paratype collected at Salina, Utah, July 24, 1930, and taken from *Quercus*

utahnus by Mr. E. W. Davis.



Explanation of Figures

Lateral and ventral views of the male genital structures of species of *Texananus* as labeled.

Texananus ultratus n. sp.

Resembling *spatulatus* in form and appearance but with vertex more broadly rounded and with extremely long narrow male plates. Length, male, 7–8 mm.

Vertex broadly very bluntly angled, almost twice as wide between eyes at base as median length.

Color: Pale yellow, irregular brown irrorations forming a broken transverse band on vertex. Pronotum rather uniformly

irrorate with brown. Scutellum pale. Elytra uniformly inscribed with ramose pigment lines,

Genitalia: Male valve semicircular, plates rapidly narrowed, about one-fourth the distance from base, and produced as long narrow apical processes with pointed tips. More than twice as long as combined basal width. Style long and narrow, apex blunt. Aedeagus similar to *spatulatus*, with a pair of long slender apical processes which extend about one-half the length of the plates.

Described from two male specimens. Holotype male labeled Arkansas and a paratype male labeled Arizona.

Notes on Heliothiinae—Confusion of Schinia velaris Grote with Schinia lanul Strecker.—Inspection of a number of collections, institutional as well as private, reveals *S. velaris* Grote confused with *S. lanul* Strecker. The type of *lanul*, from Texas, is in the Strecker Collection at the Field Museum, Chicago. One other specimen, also from Texas, is in the U. S. National Museum. The type of *velaris*, from California, is listed in the British Museum, and specimens from California are in a number of collections, not infrequently marked *lanul*.

When Hampson issued the Catalogue, he followed Strecker in considering *velaris* a synonym of *lanul*. Unfortunately, he used a specimen of *velaris*, from California, for his illustration of *lanul* in Plate LVI., Vol. IV. This illustration, a good representation of *velaris*, doubtless causes the confusion. *Velaris* is described in Canadian Entomologist XI, page 197, 1879; and *lanul* in Lep. Rhop. Het. Strecker, page 132, 1877.—Rowland R. McElvare, Port Washington, Long Island, N. Y.

Toxotus spinosus Hopping in Utah.—A single male specimen of *Toxotus spinosus*, recently described by the late Mr. Ralph Hopping, I took at Salt Lake City, on June 13, 1941. The type series were collected by Mrs. D. Fender at McMinnville, Oregon, and the Utah record extends the known distribution of the species considerably to the East. Additional series of about 15 specimens of both sexes, I captured on Coburg hills (Baldy Mountain) about 6 miles northeast of Eugene (June 29, 1941), while about 10 specimens were from the local Filbert Agricultural Experiment Station. The latter ones were found by Mr. R. Fauts in *Mellisopus*-moth traps, at Goshen, also in the vicinity of Eugene.—Borys Malkin, Eugene, Oregon.